ARRIS HOMEASSURE™:

COVERAGE, SIMPLICITY AND CONTROL FOR THE WI-FI® CONNECTED HOME

ARRIS

DELIVERING THE OPTIMAL
WI-FI EXPERIENCE

Wi-Fi connectivity has rapidly become a necessity. It's not only the means for connecting devices to the Internet, it's become the primary gateway to productivity, communication, collaboration and entertainment.

As Service Providers continue to drive higher-speed broadband service to the home, now with the ability to deliver more than 1 Gigabit per second, it is becoming increasingly clear that the bandwidth bottleneck is now in the home Wi-Fi network. This can cause significant issues for Service Providers.

When Wi-Fi isn't reliable and ubiquitous, it causes consumer dissatisfaction and increases support costs. The perception of broadband service quality is now determined by the subscriber's Wi-Fi connectivity. Service Providers must address and overcome this new challenge and deliver a new gold standard for Wi-Fi service around the quality of experience subscribers expect.

Coverage

Consumers are streaming content on multiple screens around the home. They expect a reliable connection everywhere in the house, and they need mobility for services such as video and voice calling. They don't want dead-spots or have to reconnect to a different SSID.

Performance

Expectations are rising, customers are demanding the same great performance for all devices, in every room, at the speeds promised by their provider, which many perceive to be the headline speed of their broadband connection. Services delivered over Wi-Fi are expected to work as well as they do over wired, whether it's premium UHD TV or voice calls.

Ease of Use

With increasing demands from work and life commitments, consumers have little patience for complexity with their Wi-Fi systems at home. They want something that is easy to install and use; Wi-Fi that just works. Otherwise, they call the help-desk or go to the nearest competitive provider. Some consumers just want to know their Wi-Fi password, others are more tech savvy and want to see what's happening on their network. With the right information, tools and guidance, all consumers can make changes as needed on their own.
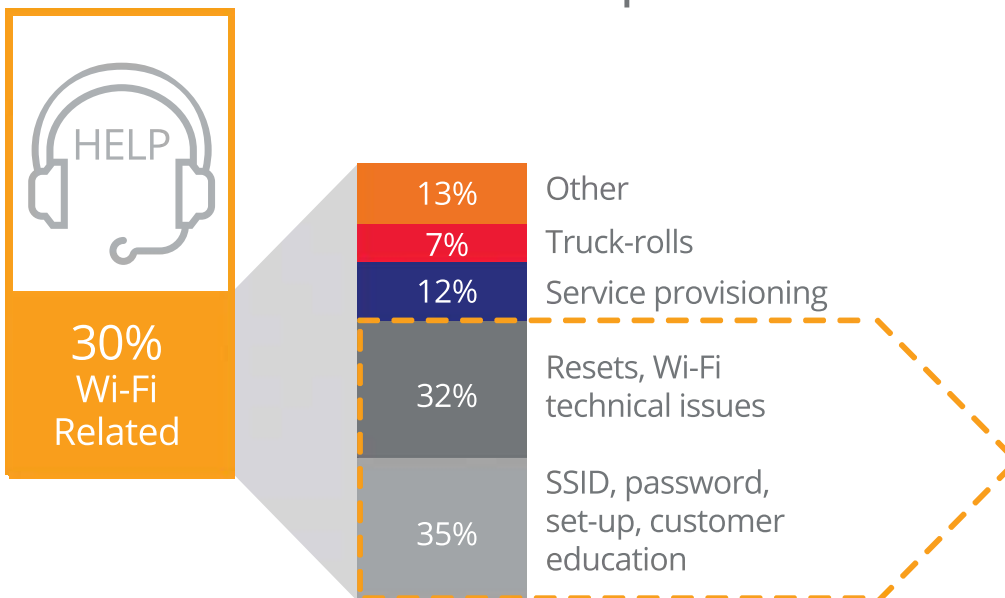
Security

Increased connectivity means more potential cyber threats. Consumers need to trust their service provider to help protect them and their families. While much of the security is hidden from the customer's view, features such as controlled guest access and the ability to limit their children's network access give them confidence that their connections are more secure.

IMPROVE QUALITY OF SERVICE WHILE
REDUCING COSTS

Service Providers need to maximize Wi-Fi network coverage and performance, and deliver consistent Wi-Fi service to every room within the home. That way they can ensure the reliability of premium services, such as UltraHD sports over Wi-Fi to connected set-tops. In addition to enhancing network performance, Service Providers need to empower the consumer by giving them the tools to install, configure and diagnose equipment on their own. With these value-added measures in place, Service Providers can significantly reduce calls to the help-desk and minimize truck-rolls, resulting in lower operating costs and higher consumer satisfaction.

Help Desk Issues

HELP

30%
Wi-Fi
Related

13%	Other
7%	Truck-rolls
12%	Service provisioning
32%	Resets, Wi-Fi technical issues
35%	SSID, password, set-up, customer education

THE SOLUTION

Reduce customer dissatisfaction and support costs through:

- Better coverage
- Maximized throughput and reliability
- Empowering consumers to install, manage and fix their network

Source: data from a large broadband service provider's help-desk. 2016

ARRIS HOMEASSURE:
DELIVERING SEAMLESS WI-FI THROUGHOUT THE HOME

ARRIS HomeAssure is a complete solution that accelerates time to deployment with a comprehensive, customized, cloud-enabled approach that simplifies network management. With its Extend, Control and Manage strategy, ARRIS helps its Service Provider customers ensure that there is high-speed, reliable Wi-Fi throughout the home.

Extend – Ensuring high-performance Wi-Fi service throughout the home with gateways and network extenders.

Control – Automated low-latency network optimization.
– Enabling diagnosis with subscriber self-service via app, web portal or voice control.

Manage – Offering remote management and analytics to the cloud to make it easier for Service Providers to monitor performance and identify trends and failure patterns to optimize the consumer experience.

Keeping the health of the Service Provider's business in mind, the ARRIS approach paves the way for a network that is scalable, flexible and secure. ARRIS HomeAssure comprises a range of gateways, modems, network extenders, consumer apps and cloud management software – all developed to help Service Providers deliver high-speed Wi-Fi services to subscribers.

Broaden Wi-Fi Coverage with Network Extenders

A gateway/router with quality Wi-Fi is the first step to addressing the majority of consumer coverage issues. Consumers can add network extenders for broader coverage as needed. The auto-configuring feature makes it easy to install the extenders on their own. SSIDs and passwords are transferred from the gateway to the extender. A single SSID for enabled mobility, for services such as video & voice calling.

Options to connect extenders to the gateway include:

- **Wi-Fi**
- **Coax using MoCa 2.0 or G.hn**
- **Powerline using G.hn**
- **Ethernet**

ARRIS GPW2200
Wi-Fi Extender

ARRIS TG3442
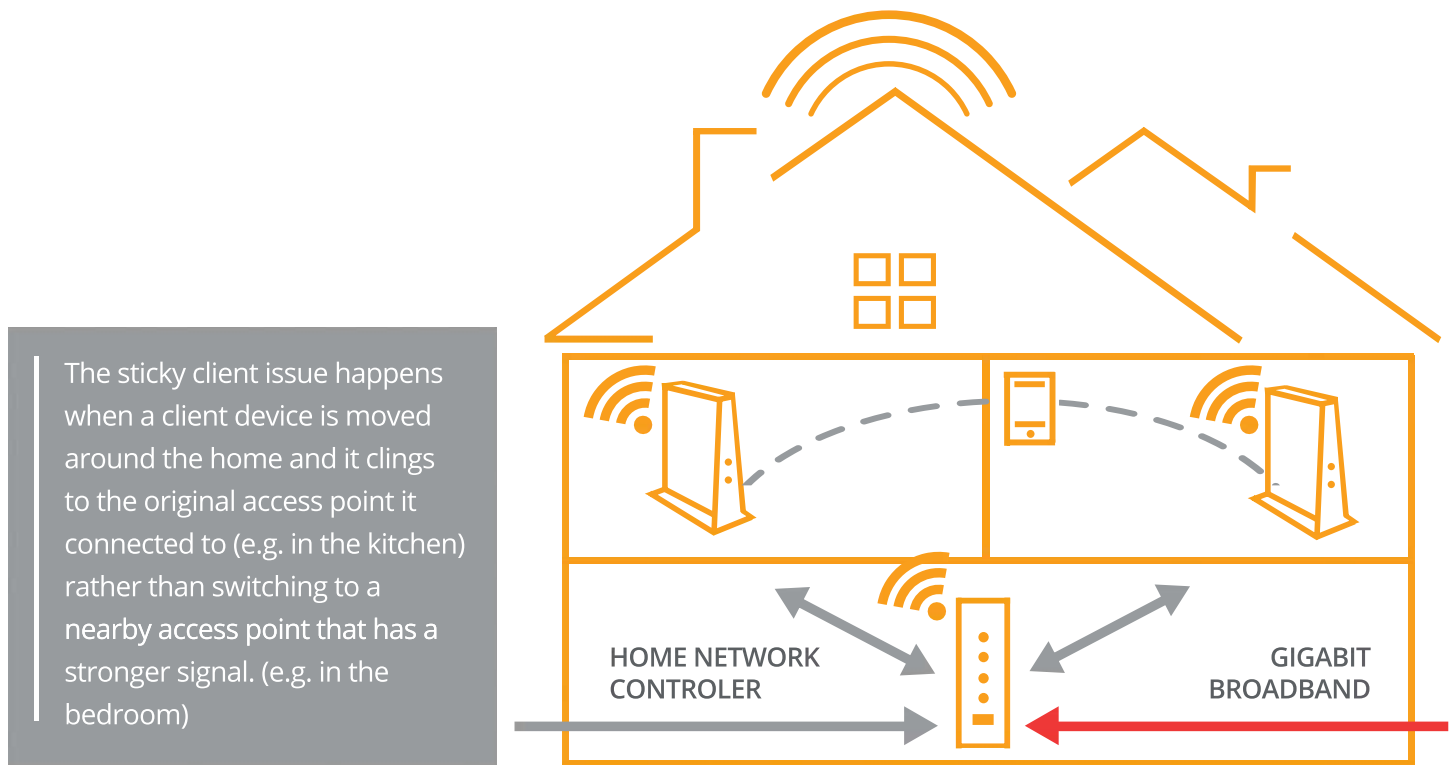Cable Gateway

ARRIS NV443B
Telco Gateway

ARRIS VAP4402
Wi-Fi Extender

Automated Network Optimization for Improved Performance

The ARRIS Home Network Controller software in the gateway optimizes network performance to make the most efficient use of every access point. The capabilities of the intelligent software include:

- Steering devices to the Wi-Fi access point with the best signal, eliminating the 'sticky client issue'

- Steering devices to an alternative access point when an access point is congested

- Moving devices between frequency bands / channels when congested

The sticky client issue happens when a client device is moved around the home and it clings to the original access point it connected to (e.g. in the kitchen) rather than switching to a nearby access point that has a stronger signal. (e.g. in the bedroom)

HOME NETWORK CONTROLER

GIGABIT BROADBAND

Fast Steering

Fast Steering is important for the reliability of applications such as video or voice calling over Wi-Fi as consumers move around the home. Devices that support the 802.11v standard are directed to move to a specific access point by the Home Network Controller, based on performance measurements gained from the Access Points in the network. Devices transition between APs within a fraction of a second, much faster than the seconds common with alternative method of 'blacklisting'.
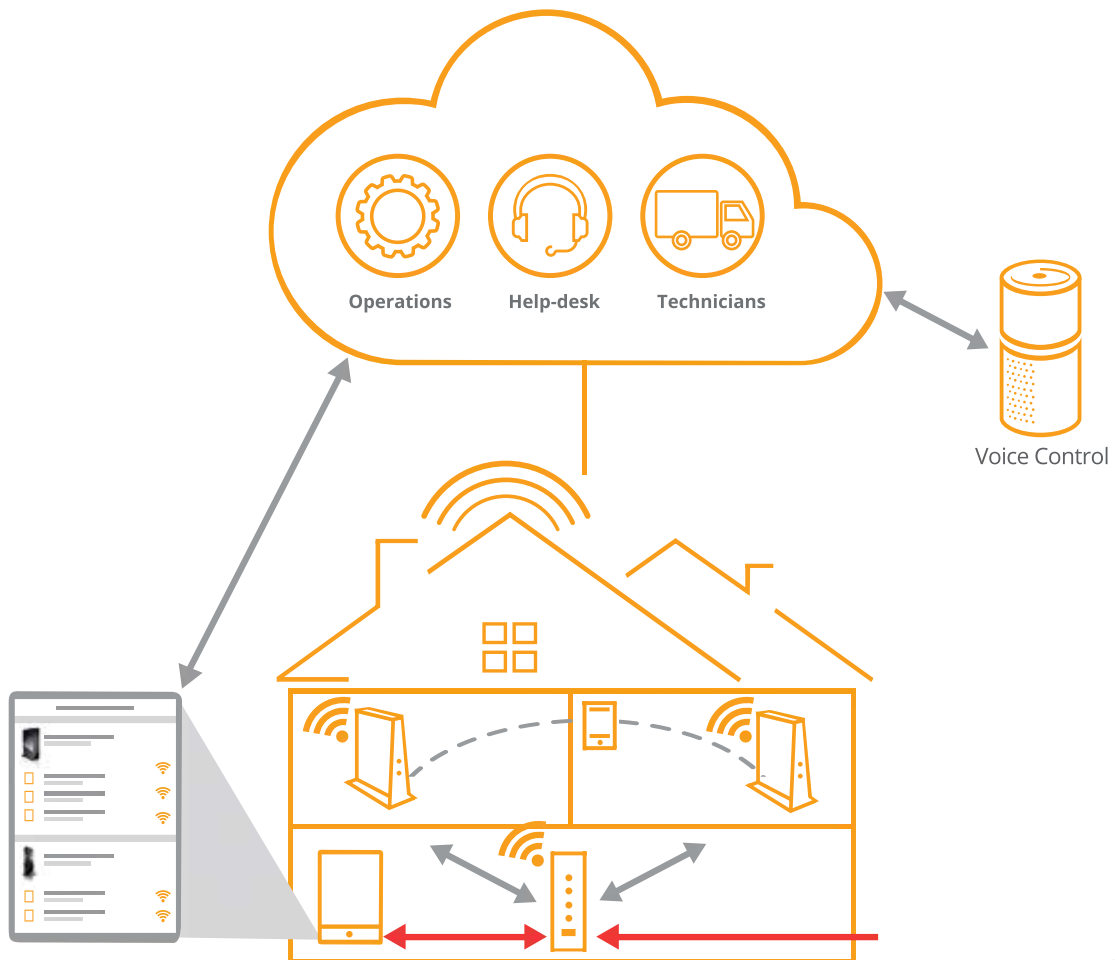
Customer Experience Management from the Cloud

ARRIS ECO Service Management is a standards-based cloud platform that delivers full management and control over the home network: setting policies for the Home Network Controller, monitoring performance and providing analytics for service improvement. ARRIS ECO's modular architecture offers flexible deployment options. It may be integrated with existing device management platforms, is available as a hosted service and is scalable to support 10s of millions of devices.

Features and benefits include:

- Remote management of the complete home network encompassing gateways, routers, extenders, set-tops and client devices.
- Quick fault resolution by making diagnostic information and analytics available to operations teams.
- Service enhancement through insights into consumer behavior and what's happening on the network.
- Improved help-desk services with tools that give customer service representatives visibility into what's connected to the network, how it's performing and changes the customer has made.
- Efficient installation and problem resolution with the Technician App that offers network visibility and diagnostics during customer visits.

The result is an improved consumer experience while reducing costs for the service provider.

Operations   Help-desk   Technicians

Voice Control

Empowering the Subscriber

Consumers can easily manage their own network with a choice of tools that suits them, such as the ARRIS consumer app, web portal or voice control. Useful task that customers can be guided through include:

- Viewing SSIDs, passwords and status of connected devices

- Configuring guest access and parental controls

- Troubleshooting simple issues

- Measuring the Wi-Fi signal to identify the best location for extenders

Security features include a guest network that can be enabled / disabled and parental controls to limit childrens' use of the Internet. Making these features easier to access enhances security by making them more likely to be used.
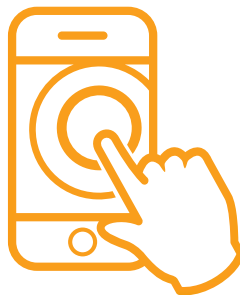
The Service Provider can integrate the self-service app framework into an existing service provider branded app or use the ready-to-go ARRIS HomeAssure App from any app store.

By adding voice control consumers can manage their network without even having to pick up a device, for example, they could say ' Enable Guest Access', or 'How many devices are on my network?'

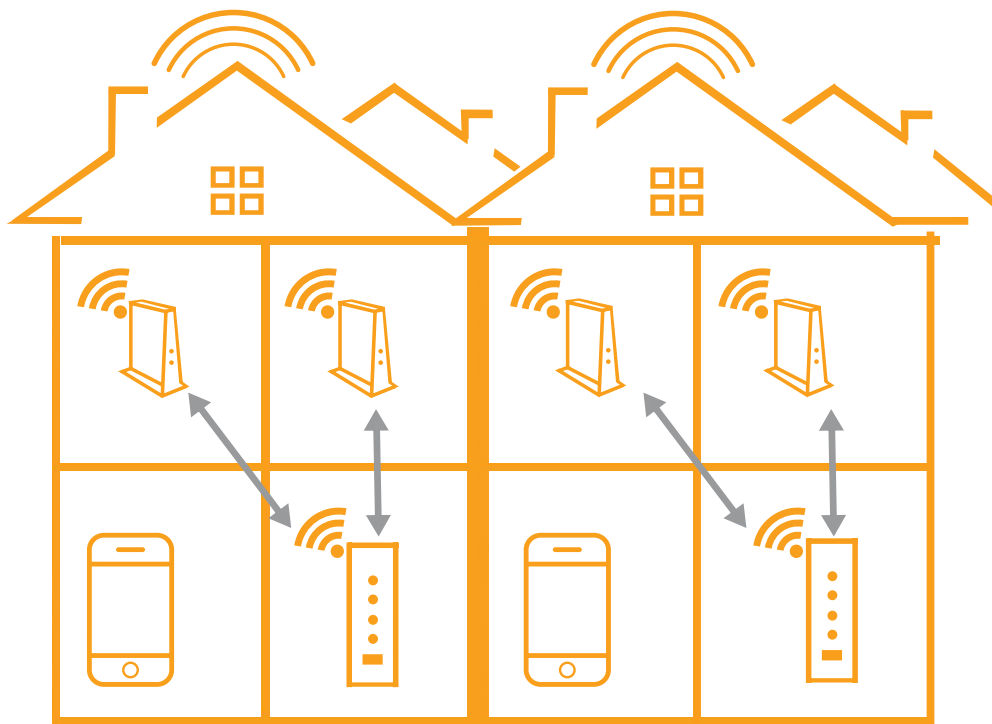Empowering the consumer reduces calls to the help desk and in turn improves their Wi-Fi experience.

"What is the Wi-Fi password?"

Multi-home Network Optimization

In multi-dwelling units, signal interference often disrupts Wi-Fi coverage. ARRIS HomeAssure will enable Service Providers to orchestrate the configuration of access points, as well as control transmission power and channel selection to improve overall Wi-Fi performance.

Professional Services for ARRIS HomeAssure

Service Providers can leverage the extensive ARRIS Wi-Fi expertise to accelerate time to market, reduce risk and opex costs with the range of professional services including:

- Consultancy
- Integration, customization and testing
- Hosted ECO cloud management services
- Support & maintenance

WHY ARRIS HOMEASSURE?

- ARRIS HomeAssure is engineered for Service Providers. Our approach is to focus on the end consumer experience and OPEX reduction for the service provider. Our flexible approach and ability to scale enable us to create the optimum solution that's right for you.

- ARRIS HomeAssure uses an open, standards based architecture for flexibility and investment protection. It offers Wi-Fi hardware vendor diversity and options to integrate third-party technologies.

- As a long established Wi-Fi product vendor, ARRIS has proven Wi-Fi expertise with world-class RF design, sophisticated test facilities and a track record of Wi-Fi optimized for video.

| Gateways / Routers with self-optimizing networking | Self-configuring extenders | Wi-Fi Set-tops | Consumer app | Cloud management | Services |

Visit the ARRIS HomeAssure Solution on arris.com
arris.ly/homeassure

arris.com